

Texas Diabetes Prevention & Control Program

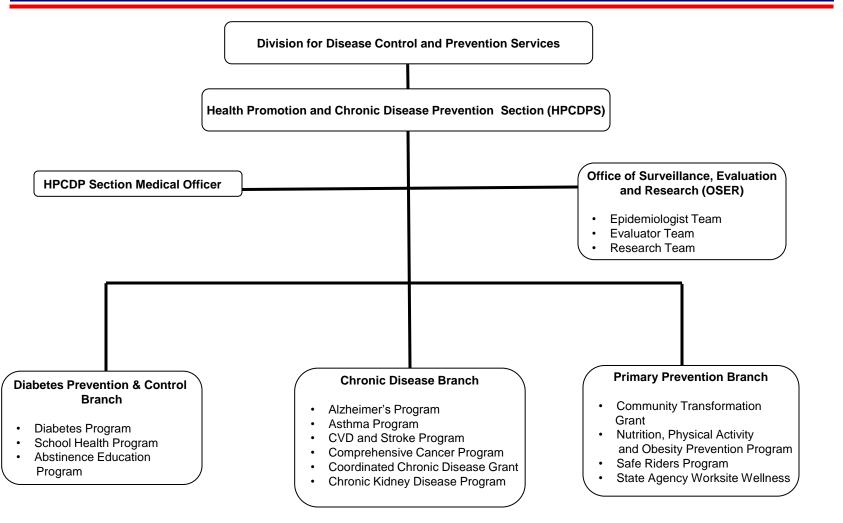
Health Promotion and Chronic Disease Prevention Section



Introduction



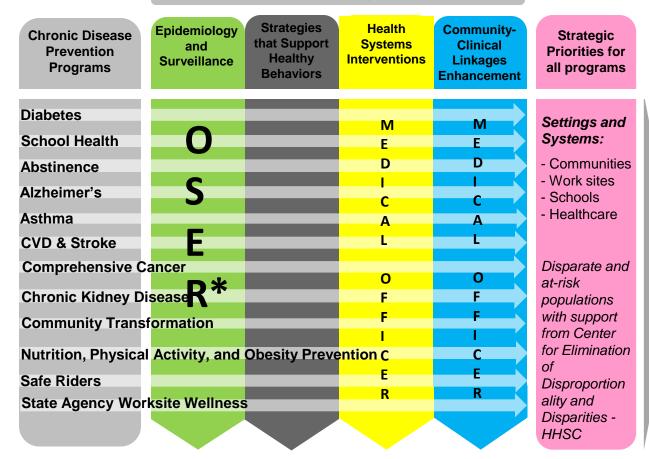
Health Promotion & Chronic Disease Prevention Section





Coordinated Chronic Disease Model

Four Domains of Program Activities



Outcomes

- Increase the percentage of Texans with no chronic diseases
- Increase the percentage of Texans with improved management of chronic disease
- Eliminate health disparities and disproportionality

^{*} Office of Surveillance, Evaluation and Research



Data and Surveillance



Main Types of Diabetes

- Type 1 diabetes, formerly called juvenile diabetes, is usually an immune disorder diagnosed in children, teenagers, and young adults.
- Type 2 diabetes, formerly called adult onset diabetes, is the most common type of diabetes. About 95 percent of people with diabetes have type 2.
- Gestational diabetes is a type of diabetes that develops only during pregnancy. Gestational diabetes affects 2 to 10 percent of all pregnancies.
- **Prediabetes** is a condition in which individuals have blood glucose or A1c levels higher than normal but not high enough to be classified as diabetes. People with prediabetes have an increased risk of developing type 2 diabetes, heart disease, and stroke.



Diagnosing Diabetes

Blood Test Levels for Diagnosis of Diabetes and Prediabetes

	A1C (percent)	Fasting Plasma Glucose (mg/dL)	Oral Glucose Tolerance Test (mg/dL)
Diabetes	6.5 or above	126 or above	200 or above
Prediabetes	5.7 to 6.4	100 to 125	140 to 199
Normal	About 5	99 or below	139 or below

Definitions: mg = milligram, dL = deciliter

For all three tests, within the prediabetes range, the higher the test result, the greater the risk of diabetes.



Prevalence of Prediabetes

Texas Behavioral Risk Factor Surveillance System (BRFSS), 2010

Percentage of Texas adults aged 18 years or older with prediabetes:

Interview only - Self-reported

5.6%

National Health and Nutrition Examination Survey (NHANES) 2005-2008

Percentage of U.S. adults aged 20 years or older with prediabetes:

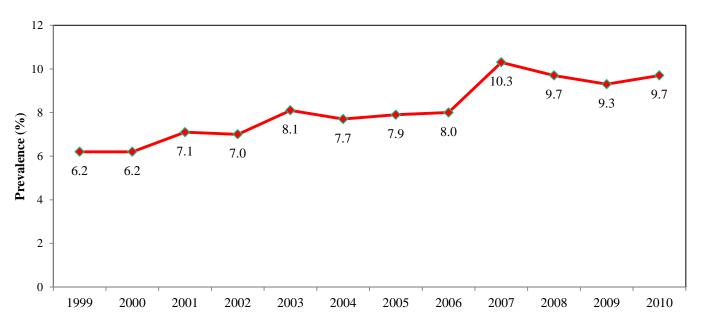
Interview and Physical Examination

35%



Prevalence of Diabetes in Texas, 2010*

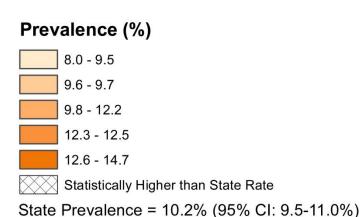
In 2010, approximately 1.8 million Texans were diagnosed with diabetes. An additional 451,009 are estimated to be undiagnosed.

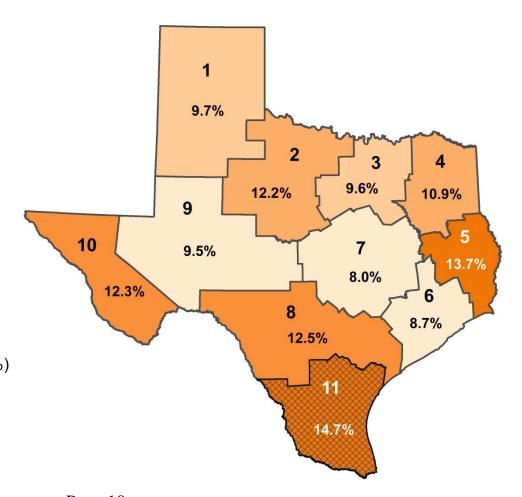


Source: Texas BRFSS for persons who are eighteen years of age and older, and include both Type 1 and Type 2 Diabetes. Persons with diabetes include those who report that they have been told by a doctor that they have diabetes. Women who report diabetes only during pregnancy are not included in prevalence. Note: All reported rates (%) are weighted for Texas demographics and the probability of selection and thus are not derived from the simple division of numerator and denominator. Undiagnosed diabetes estimate based on 2003-2006 NHANES age-adjusted prevalence estimate of 2.5% for persons twenty years of age and older.



BRFSS Estimated Diabetes Prevalence by Health Service Region, 2011

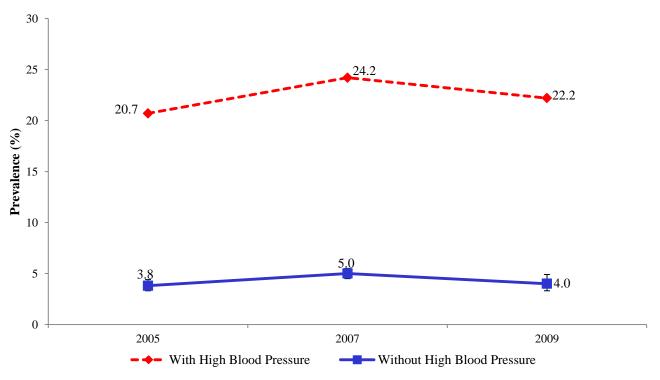






Texas Diabetes Prevalence by High Blood Pressure Status

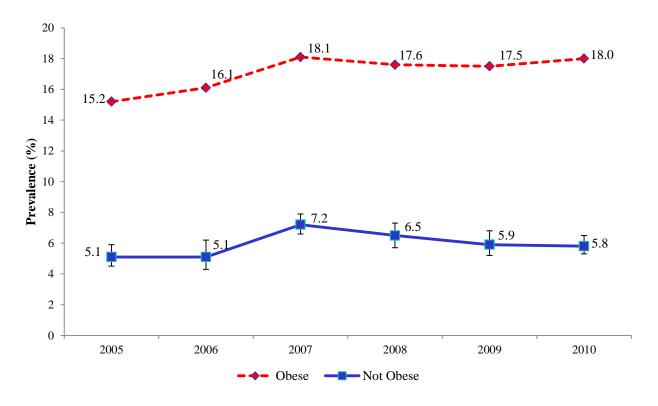
Texans with high blood pressure are up to five times more likely to have diabetes than those without high blood pressure.





Texas Diabetes Prevalence by Obesity Status

Texans who are obese are consistently more than twice as likely to have diabetes than those who are not obese.

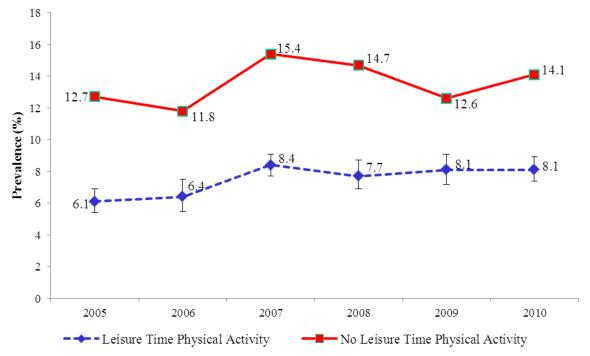


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Texas Diabetes Prevalence by Leisureervices Time Physical Activity Status

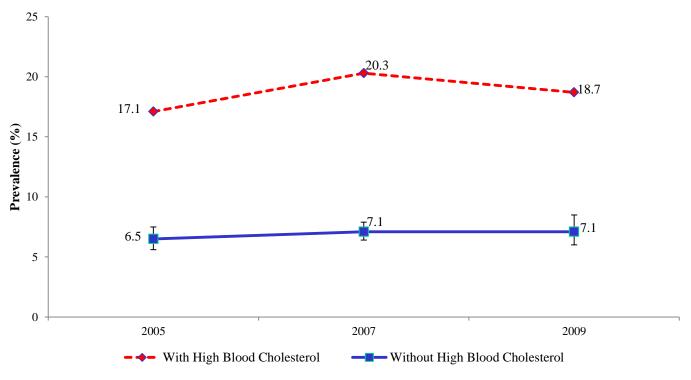
Diabetes prevalence estimates were consistently higher among adults who reported no leisure-time physical activity than for those who did.





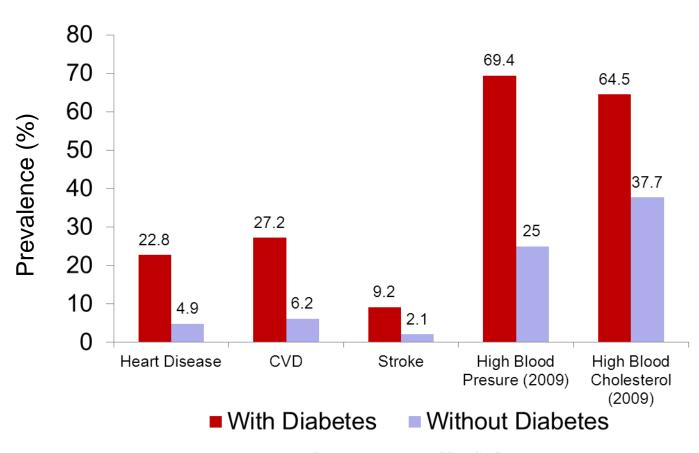
Texas Diabetes Prevalence by High Blood Cholesterol Status

Texans with high blood cholesterol are more than two times likely to have diabetes than those without high blood cholesterol.

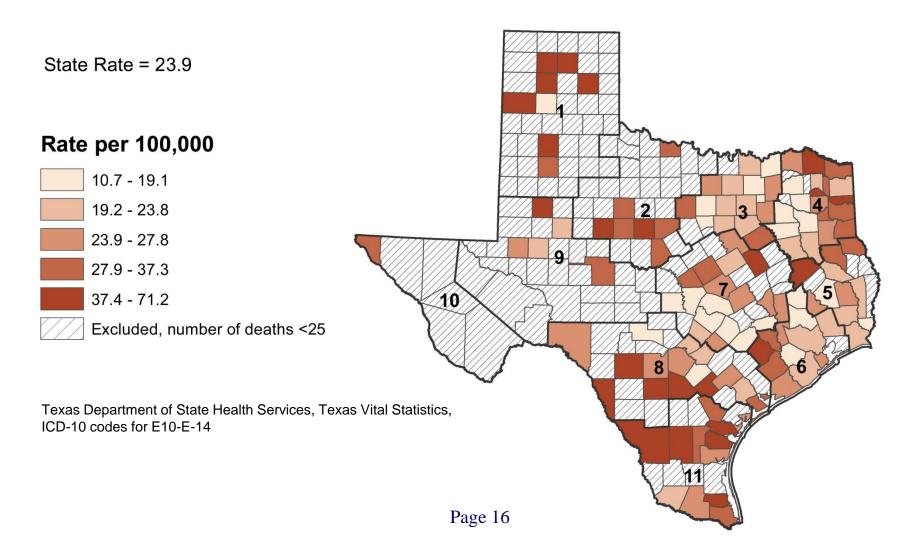




Selected Diabetes Complications Texas, 2010

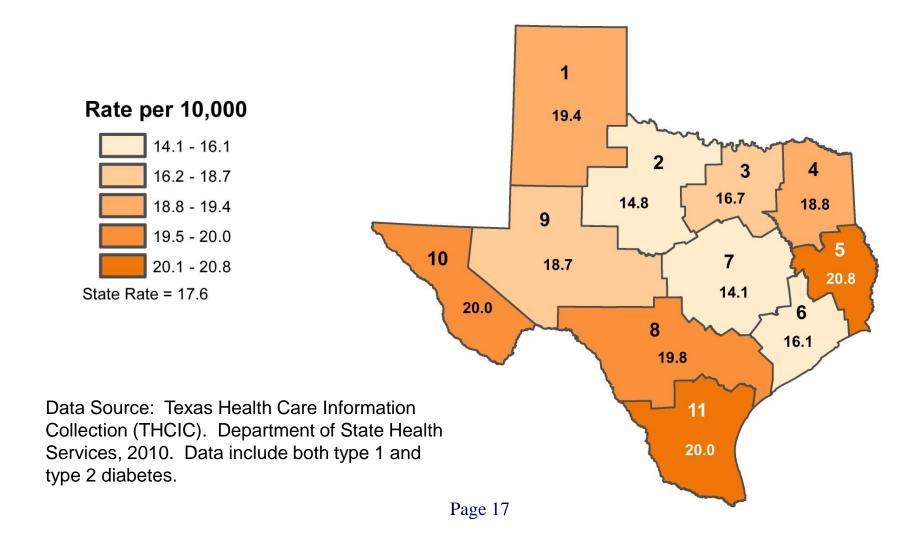


Source: Texas BRFSS, DSHS





Diabetes Crude Hospitalization Rate by Health Service Region, 2010





Implementation Activities 2012-2013



- Projects include federally qualified health centers, local health departments, and other non-profits.
- Projects conduct diabetes prevention and management interventions and implement evidence-based programs and strategies at the local level to initiate policy, systems and environmental changes.
- Projects are located in both rural and urban settings, targeting racial and ethnic minorities that have disproportionate rates of diabetes and have limited access to health services.





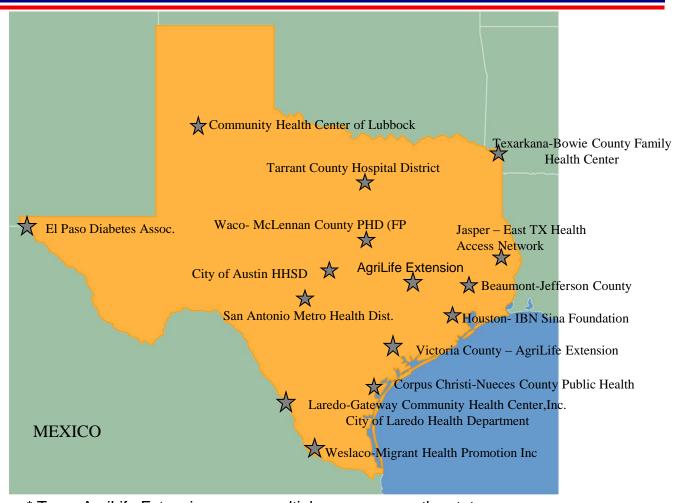






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^{*} Texas AgriLife Extension serves multiple areas across the state



- Diabetes Classes/Interventions:
 - Diabetes Self-Management Education (DSME) classes conducted for persons with diabetes and their families. A minimum of two series of DSME are conducted annually and held once a week for four weeks.
 - Nutrition series are conducted separately and include a minimum of three classes that meet for at least 30 minutes, once per week.
 - Physical Activity interventions are on-going and no less than 30 minutes, once per week, for a minimum of eight weeks.



- Participant Demographics Classes/Interventions:
 - Middle-aged
 - Female
 - Hispanic
 - Low socioeconomic status
 - Underinsured
 - Limited access to care
 - Poor health profile

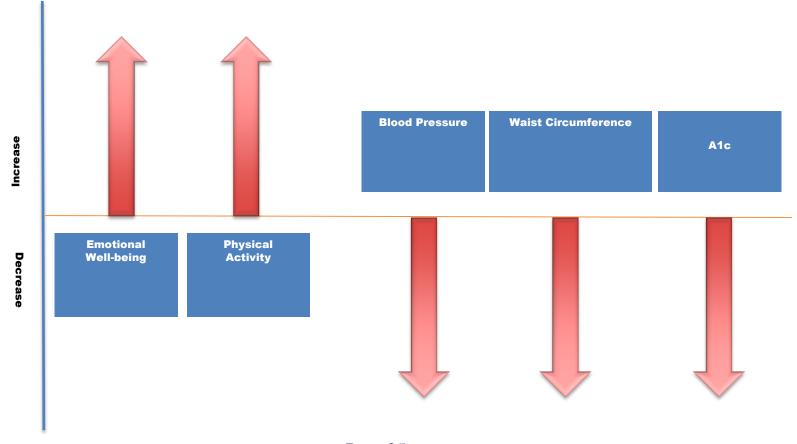


Data Collection - Health Outcome Measures:

- Required
 - Waist circumference
 - BMI (Body Mass Index)
 - Tobacco status/cessation
 - Blood Pressure
- Encouraged
 - A1c
 - Cholesterol/Lipid Control



Preliminary Outcome Results





Texas' Prevent Type 2 Social Marketing Campaign

- "Prevent Type 2" campaign targets Hispanics at high risk, raises awareness about diabetes risk factors, shows serious consequences of diabetes, and motivates the audience to get tested for prediabetes/diabetes.
- Campaign comprised of 30-second & 15-second TV spots in English and Spanish, Spanish and English websites, and banner and online ads.
- In 2011-12, the English and Spanish TV spots ran in Houston, Corpus Christi, Rio Grande Valley, Laredo, El Paso, Lubbock, and San Antonio targeting adults 25-50.



Campaign Objectives Prevent Type 2

- Target Hispanics as high risk audience.
- Raise awareness about diabetes risk factors.



- Show serious consequences of diabetes.
- Motivate audience to get tested.

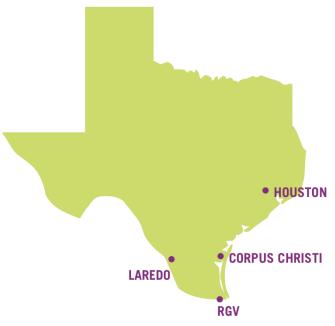


Research-based Campaign Prevent Type 2

 Three focus groups in Hispanic communities to gauge health attitudes, understanding of diabetes and preferred information sources.

Findings

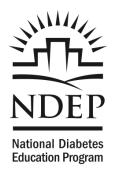
- Don't recognize they are at risk for diabetes.
- Don't understand behavior changes now can help prevent diabetes later.
- Respond to hard-hitting consequences of diabetes.
- Prefer TV and online info.





Campaign Approach Prevent Type 2

- Show serious consequences.
- Create new Spanish-language TV spot and website.
- Conduct 2-week paid media campaign around diabetes observances in November and March.
- Use existing materials where possible.

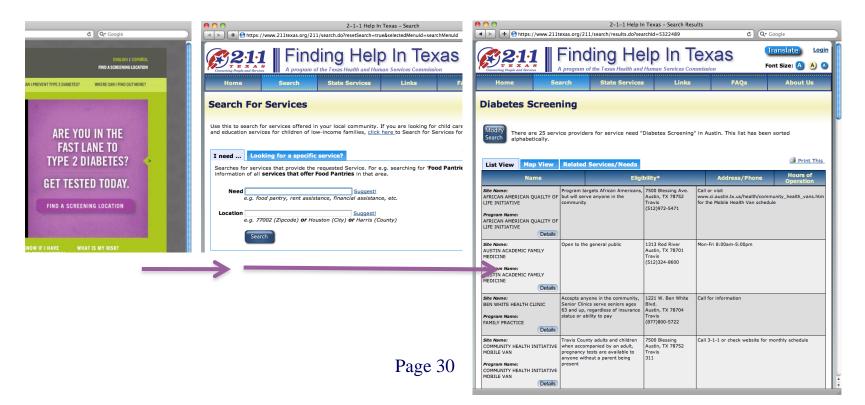






Key Messages Prevent Type 2

- You are already at risk.
- Get tested for type 2 diabetes.
- Visit website for more information.





Campaign Elements Prevent Type 2

- 30-second & 15-second TV spots in English and Spanish.
- PrevenirTipo2.org/PreventType2.org websites.
- Banner and online ads.
- National Diabetes Education Program (NDEP) "game plan" materials.



"Slippers" TV PSA Prevent Type 2

Video may be viewed on the website at www.preventtype2.org



Diabetes Website Prevent Type 2







Banner Ads Prevent Type 2











FACEBOOK Ads Prevent Type 2

La diabetes viene de familia



¿Tiene alguno de sus parientes diabetes tipo 2? Eso lo pone en riesgo a usted también. Infórmese más. **PrevenirTipo2.org**

Proteja a sus hijos



Es probable que 1 de cada 3 niños nacidos después del 2000 desarrolle diabetes tipo 2. Infórmese más. **PrevenirTipo2.org**

Texas Hispanics at Risk



One in 3 Hispanics may develop type 2 diabetes. Don't chance it. Get tested. Find out how diet and exercise can help prevent it. **PrevenirTipo2.org**





Results Prevent Type 2

TV

- 19,613,639 gross impressions
- 2,194,105 total net reach
- 86% reach/ average frequency=7.8
- \$137,436 added value



Online

- 49 million impressions
- 3.56% average conversion rate
- Facebook and Google were best performers

La diabetes viene de familia



¿Tiene alguno de sus parientes diabetes tipo 2? Eso lo pone en riesgo a usted también. Infórmese más.

PrevenirTipo2.org

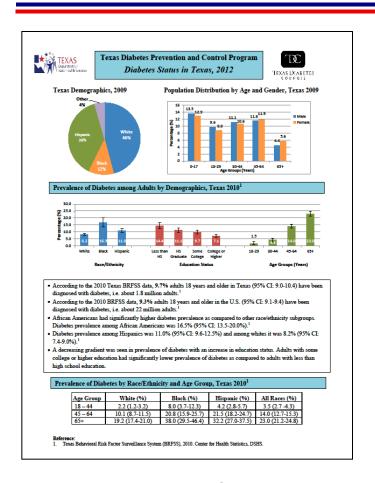


Diabetes Empowerment Education Program (DEEP)

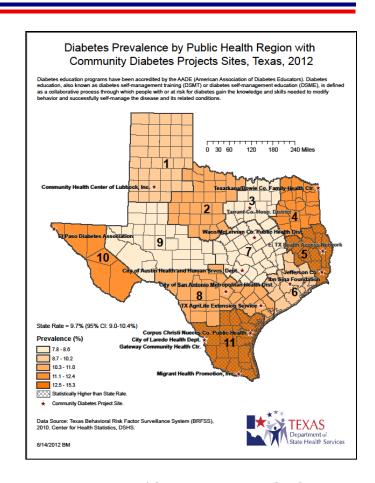
- A licensed diabetes self-management education curriculum.
- Provides communities with tools to better manage diabetes and is based on principles of empowerment and adult education.
- Train-the-Trainer session held in Austin March 19-21, 2013 with 23 persons trained.



Resources and Publications



Prevalence Fact Sheet



Prevalence/Contractor GIS Map



Resources and Publications

The Burden of Diabetes In Texas

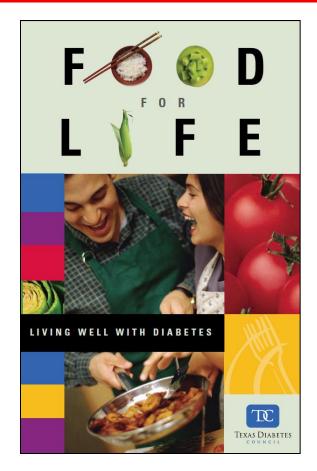
April 1, 2013

A Report Prepared by the Office of Surveillance, Evaluation, and Research Health Promotion and Chronic Disease Prevention Section Texas Department of State Health Services Austin, Texas





Diabetes Burden Report



Diabetes Literature



Texas Diabetes Council



Texas Diabetes Council

- Established in 1983 through HSC Chapter 103 and TAC Title 25, Part 9.
- Governor-appointed, legislatively mandated.
- Comprised of 11 citizen members and one agency representative from HHSC, DSHS, and DARS.
- Works with private and public health organizations to promote diabetes prevention and awareness.





Diabetes Medicaid Pilot Project

- House Bill 1990, 81st Session, 2009, relates to a diabetes selfmanagement training pilot program under the state Medicaid Program.
- Implemented between 2011-12 with 3 active sites and 89 participants.
- Delivered face-to-face education to fee-for-service Medicaid clients with diabetes.
- Ended with statewide transition to Medicaid managed care.
- Several clinical metrics trended upward such as cholesterol tests, retinal eye exams, and urine albumin.



Diabetes A1c Registry

- SB 510, 82nd Session, 2011, relates to a permanent, voluntary, statewide diabetes mellitus registry.
- Legislation established a diabetes mellitus registry pilot during the 80th Session in 2007 and extended it during the 81st Session in 2009.
- Tracks glycosylated hemoglobin levels for each person who has a lab test at a clinical laboratory in a participating public health district.
- San Antonio Metropolitan Health District is the only participating district that meets population requirements.
- In 2011, 34,649 hemoglobin A1c test results/values for 18,501 unique individuals tested with 33% less than 7 from one of four reporting laboratories (University Health System).

Diabetes Reports & Assessments

- SB 796, 82nd Session, 2011, relates to reporting on and assessing programs for the prevention and treatment of diabetes in Texas.
- Requires a biennial report on Health and Human Services Commission (HHSC) priorities for addressing diabetes within the Medicaid population.
- Requires a one-time report that contains an estimate of the annual direct and indirect costs to both the public and private sectors of preventing and treating persons with diabetes.
- Requires a biennial statewide assessment of existing programs for the prevention and treatment of persons with diabetes administered by HHSC or a Health and Human Services Agency.



Texas Diabetes Council

- Legislative Mandates:
 - Public and professional education about all types of diabetes.
 - Development of programs for preventing type 2 diabetes.
 - Development of programs for early detection and diagnosis of diabetes.
 - Development of diabetes treatment services and programs for patients.





Risk Assessment for Type 2 Diabetes Health Services Legislative Timeline:

1999-2001

HB 1860 [76R] creates pilot program for Acanthosis Nigricans (AN) screening during vision/hearing/scoliosis screening in Education Service Centers (ESCs) Regions 1 and 19 (Rio Grande Valley and El Paso).
 Administered by UT Pan American Border Health Office.

<u>2001-2003</u>

 HB 2989 [77R] expands screening to ESC Region 2 (Corpus Christi), Region 3 (Victoria), Region 13 (Austin), Region 15 (San Angelo), Region 18 (Midland/Odessa), and Region 20 (San Antonio).

2003-2007

 HB 2721 [78R] Expands screening to include ESC Region 4 (Houston), Region 10 (Dallas), and Region 11 (Fort Worth).



Risk Assessment for Type 2 Diabetes

Legislation: SB 415 80 [R] Status: Passed

- Recommend who is responsible for conducting risk assessments for schools who do not employ a school nurse.
- Advise on age groups for risk assessment.
- Recommend method for recording/reporting number of youth at risk for type 2 diabetes and who qualify for the free or reduced-price lunch program.
- Contribute to Texas Diabetes Council's State Plan and recommend deadlines for implementing recommendations.
- Submit recommendations no later than Sept. 1 of each evennumbered year.



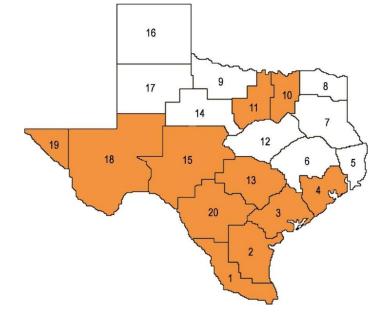
Risk Assessment for Type 2 Diabetes

- 4 education coordinators
- 11 ESC Regions
- 6887 school nurses

1,135,705 students in mandated population

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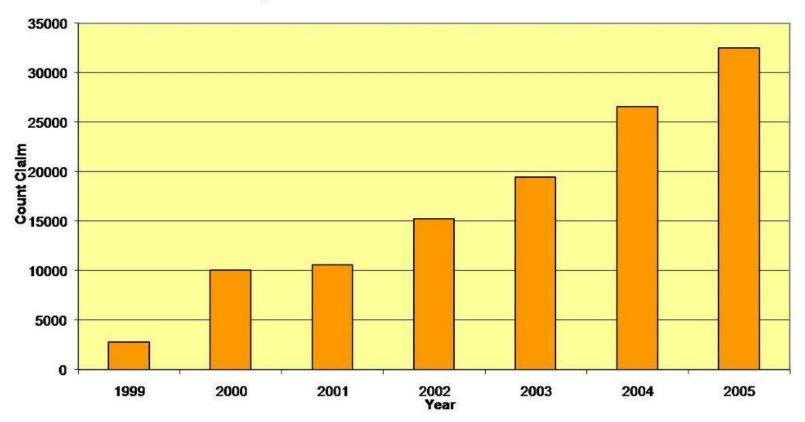
(grades 1, 3, 5, and 7)





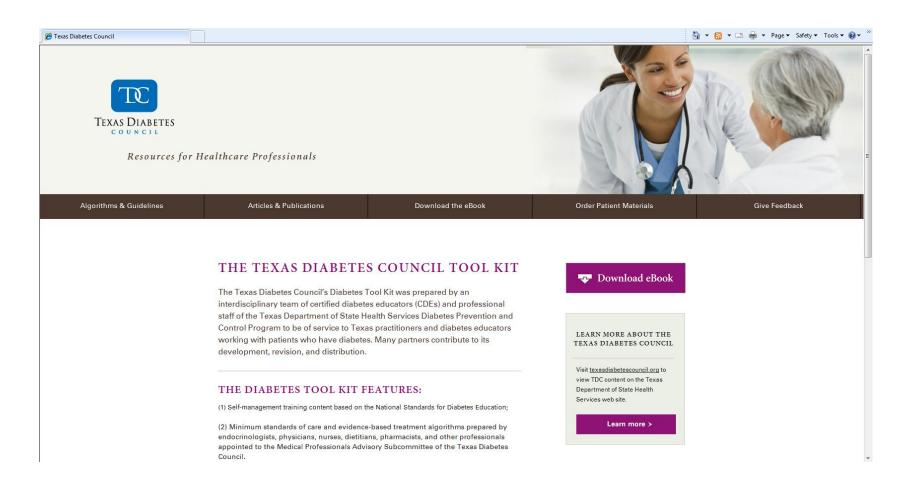
Risk Assessment for Type 2 Diabetes

Acanthosis Nigricans CPT Code 701.2 Claim Count among children 0-17 years old years old Texas Medicaid SFY 1999-2005





Minimum Standards of Care for Diabetes in Texas

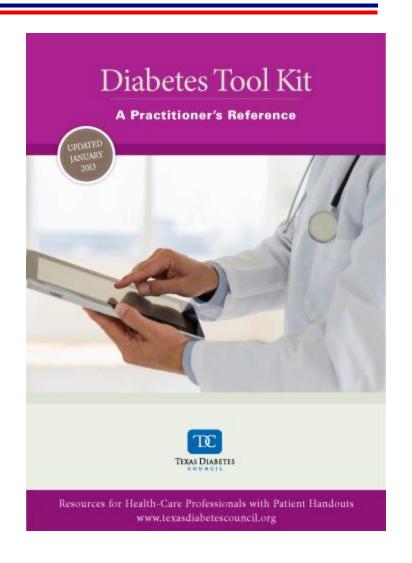




Minimum Standards of Care for Diabetes in Texas

- Texas Diabetes Council Diabetes Tool Kit
 - Targets healthcare professionals.
 - Contains treatment guidelines and algorithms, patient education materials, articles and publications.

www.tdctoolkit.org





Minimum Standards of Care for **Diabetes in Texas**

Diabetes Minimum Practice Recommendations



Exam/Test/Counseling Schedule

Suggested Result Codes: 0-Ordered, N-Normal, A-Abnormal, E-Done Elsewhere, R-Referred

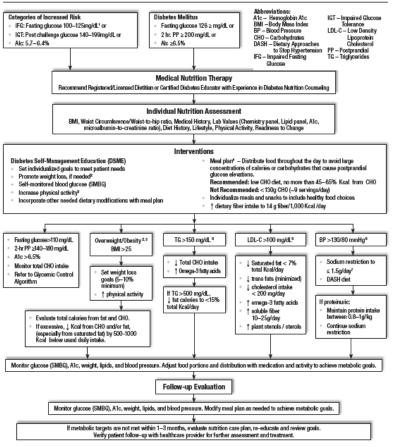
1.	Complete history & physical	Initial visit and at clinician's discretion (including risk factors, exercise & diet)	Date Result			
2.	Diabetes Education ⁴	Initial visit and at clinician's discretion	Date Result			
3.	Medical Nutrition Therapy	Initial visit and at clinician's discretion	Date Result			
4.	Exercise Counseling	Initial visit and at clinician's discretion	Date Result			
Б.	Psychosocial Counseling	Initial visit and at clinician's discretion	Date Result			
6.	Lifestyle/Behavior Changes Counseling	Initial visit and at Smoking cessation clinician's discretion Alcohol reduction	Date Result			
7.	Weight/Height/BMI Adult Overweight–BMI 25-29.9 Adult Obesity–BMI > 30	Every Visit	Date Result			
8.	Blood Pressure Target: <130/80 mm Hg Target: < 125/75 mm Hg If ≥ 1g proteinurla	Every Visit	Date Result			
9.	Foot Inspection Visual Inspection for skin and nall lesions, calluses, Infections	Every Visit	Date Result			
10.	Oral/Dental Inspection Refer for dental care annually or as needed	Every Visit	Date Result			
11.	Growth and Development (Including height) in Children	Every Visit	Date Result			
12.	Aspirtn/Antiplatelet Prophylaxis (If no contraindications) Type 1 or 2 ≥ age 30	Every Visit	Date Result			
13.	A1c ² Individualize goal based on patient risk factors Intensive management - A1c < 6-7% Less Intensive management - A1c < 7-8%	Every 3–6 months	Date Result			
14.		Type 1: Annually beginning 5 years from diagnosis Type 2: initial visit then annually	Date Result			
15.	Dilated funduscopic eye exam By an ophthalmologist or therapeutic optometrist	Type I: Annually beginning 5 years from diagnosis Type 2: Initial, then annually	Date Result			
16.	Oral/Dental Exam Refer to appropriate provider	Annually or as needed	Date Result			
17.	Foot Exam Complete foot exam and neurologic assessment	Annually or as needed				
18.	Lipid Profile Targets: LDL-C <100 mg/dL (CHD <70mg/dL) Triglycerides <150 mg/dL	Annually If at goal; otherwise every 3-6 months (> age 18)	Date Result			
19.	Immunizations Influenza (Flu) Vaccine Td Vaccine Pneumococal Vaccine Childhood Immunizations	Annually Every 10 Years Initial; repeat per ACIP Per CDC Schedule	Date Result			

Diabetes Education should address the following: self-management skills (i.e. monitoring, sick day management), medications, frequency of hypoglycemia, high-risk behaviors (e.g. smoking, alcohol), adherence with self-care (self-management plan from the last visit including diet, medication use, exercise plan), assessment of complications, diabetes knowledge and follow-up of referrals.

Diabetes Medical Nutrition Therapy and Prevention Algorithm For Adults







- Protections

 1 This text requires the use of a glucose load containing the equivalent of 75 g arhydrous glucose dissolved in water.

 4 AAA. Standards of Hedrical Care in Diabetes = 2010. Diabetes Care. 2010;33 (uppl f) :511-561.

 5 Refer to Weight Loss Algorithm

 6 Refer to Weight Loss Algorithm

 7 Refer to Exercise Algorithm

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- Refer to Hypertension Algorithm Dietary Guidelines for Americans, 2006. Available online at http://www.health.gov/dietaryguidelines/dga2005/ document/html/chapter8.htm Accessed on July 22, 2010.

Fintensity management It: Absent/stable cardiovascular disease, milid-moderate microvascular complications, infact hypoglycemia awareness, infrequent hypoglycemic episodes, recently diagnosed diabetes. Less Intensive management If: Evidence of advanced or poorly controlled cardiovascular and/or microvascular complications, hypoglycemia unawareness, vulnerable patient (le, impaired cognition, dementia, fall history).



Care of Students with Diabetes in Texas Schools

- Per House Bill 894, 79th Session, 2005, the Texas Diabetes Council has developed guidelines for training school personnel to be diabetes care assistants.
- The guidelines and FAQs are accessible online at <u>www.texasdiabetescouncil.org</u>







Future Directions



Future Directions

- CDC Chronic Disease and School Health Grant.
- National Diabetes Prevention Program (NDPP).
- Texas Diabetes Council Collaboration with Texas Medicaid.
- Diabetes-related Riders 83rd Legislative Session.

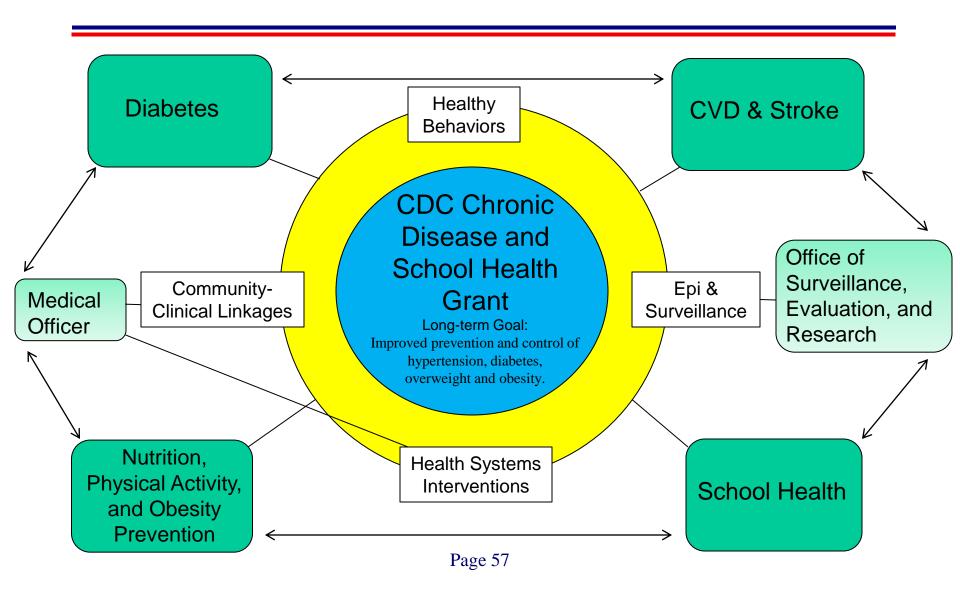


CDC Chronic Disease and School Health Grant

- Supports statewide implementation of cross-cutting approaches to promote health and prevent and control chronic diseases and their risk factors.
- Program areas include: diabetes, heart disease, obesity, school health and data/surveillance.
- Activities and strategies are focused around chronic disease domains:
 - epidemiology and surveillance,
 - environmental approaches to healthy behaviors,
 - health system interventions, and
 - community-clinical linkages.



CDC Chronic Disease and School Health Grant





Effect of Treatment on Incidence of Diabetes in the Diabetes Prevention Program

	Placebo	Metformin	Lifestyle
Annual incidence of diabetes	11.0%	7.8%	4.8%
Relative Reduction (compared with placebo)		31%	58%
Number needed to treat (to prevent 1 case in 3 years)		13.9	6.9

The DPP Research Group, NEJM 346: 393-403, 2002 All participants had IGT



National Diabetes Prevention Program (NDPP)

- Designed to reverse the increase in new cases of type 2 diabetes.
- Features a structured lifestyle intervention to help participants at high risk for type 2 diabetes lose a moderate amount of weight (5% to 7% of their current weight) and increase their physical activity to 150 minutes per week.
- Results proven to prevent or reduce the onset of diabetes by 58%.
- Launched initially through YMCAs with United Healthcare as first third-party payer to offer participant reimbursement.





National Diabetes Prevention Program

Key Levers

Train the workforce 1

Implement a recognition program 2

Implement sites 3

Increase referrals and utilization 4



Proposed Diabetes-related Riders 83rd Legislative Session

- Rider 71 Reporting on Gestational Diabetes in Medicaid
 - Identify impact of diabetes on Medicaid population.
- Rider 72 Texas Medicaid and Texas Diabetes Council
 - Health and Human Services Commission to consider advice from the Texas Diabetes Council on new programs, rates and initiatives that could impact Medicaid patients with diabetes or their access to care.
- Rider 75 Diabetic Supplies and the Medicaid Preferred Drug List
 - Health and Human Services Commission to pursue inclusion of diabetic supplies on the preferred drug list.



Thank you.



Rachel Samsel, MSSW

Director, Office of Healthcare Delivery Redesign

Center for Program Coordination

and Health Policy



- Texas has a five-year Medicaid demonstration (1115)
 waiver to enable hospitals and other providers to earn up
 to \$11.4 billion (All Funds) for Delivery System Reform
 Incentive Payment (DSRIP) projects.
 - DSRIP projects improve Texas' health care delivery system, including access to care, quality of care, and health outcomes.
- Approximately 1300 DSRIP projects were received from 20 Regional Healthcare Partnerships across the state, including local health departments
- CMS has approved over 80% of proposed projects



- Approximately 140 DSRIP projects were proposed that included diabetes related outcomes
 - HbA1c control
 - Retinal eye exams
 - Foot exams
 - Blood pressure control
 - Uncontrolled diabetes admissions rate
 - Diabetes 30 day readmission rate
 - Diabetes short term complication rate



- Topics of proposed diabetes related DSRIP projects
 - Diabetes management registry
 - Screening and treatment protocol to identify patients with dual diagnoses (physical and behavioral health) targeting diabetes
 - Establishing diabetes care teams
 - Community health worker program
 - Adolescent peer support team
 - Gestational Diabetes
 - Cell phone application for evidence-based health promotion
 - Self-management and wellness programs



Impact of Diabetes on Medicaid Population

Alexander Melis
Medicaid/CHIP Division



Diabetes and Medicaid: CY 2011 Enrollment and Costs

- Medicaid FFS: \$67 million (approximately 81,000 clients)
- Medicaid Managed Care: \$141 million (approximately 65,000 clients)
- Vendor Drug: \$ 77,978,821



Diabetes and Medicaid: Diabetes-related services

- Diabetes screenings and treatments are available for adults and children through Medicaid Fee-for-Service (FFS) and managed care organizations (MCOs) as medically indicated.
- Gestational diabetes screening is currently available through Pregnant Women's Medicaid, CHIP and Managed Care as medically necessary.
- Currently, self-management education and other related services for children and eligible adult clients with diabetes are provided through regular physician/client consultation for clients enrolled in the Medicaid FFS program.
- MCOs must provide or arrange the provision of comprehensive Disease Management (DM; which includes patient selfmanagement education) for individuals with chronic health conditions, including diabetes.



Diabetes and Medicaid: Demographics

	Medicaid FFS/PCCM without Dual-Eligible included		Medicaid FFS/PCCM with Dual Eligible included		
	#	%	#	%	
Туре		•	•	•	
Type 1	2,401	3%	5,421	2%	
Type 2, or unspecified	70,298	88%	216,579	96%	
Gestational	10,205	13%	10,212	5%	
Race/ethnicity					
White, non-Hispanic	20,383	29%	62,141	29%	
Black, non-Hispanic	12,614	18%	36,202	17%	
Hispanic	39,659	56%	99,016	46%	
Other	2,248	3%	9,636	4%	
Missing/Unknown	5,163	7%	19,680	9%	
Age					
<18	5,235	7%	5,273	2%	
18-64	63,623	90%	108,468	50%	
65+	11,209	16%	112,934	52%	
Total	80,067		226,675		



Diabetes and Medicaid: Priorities

 Quality screening and treatment services to identify and treat patients with diabetes.

Prevention, timely diagnosis and treatment are critical in patients with diabetes mellitus.

Pre-diabetes and diabetes disease self management education.

The overall objectives of diabetes self-management education (DSME) are to support informed decision-making, self-care behaviors, problem-solving and active collaboration with the health care team and to improve clinical outcomes, health status, and quality of life.

Gestational diabetes screenings.

Numerous national and international medical organizations, along with expert panels and working groups, have issued specific guidelines with recommendations for screening and diagnosing Gestational Diabetes Mellitus (GDM).

 Dialogue with advisory bodies and external stakeholders to inform the development and improvement of Medicaid diabetes programming and benefits

HHSC is committed to providing individuals with pre-diabetes or diabetes in an effective and evidence-based manner that is responsive to their needs. HHSC will continue to work with parties interested in Texas Medicaid diabetes services, including TDC, in support of that goal.